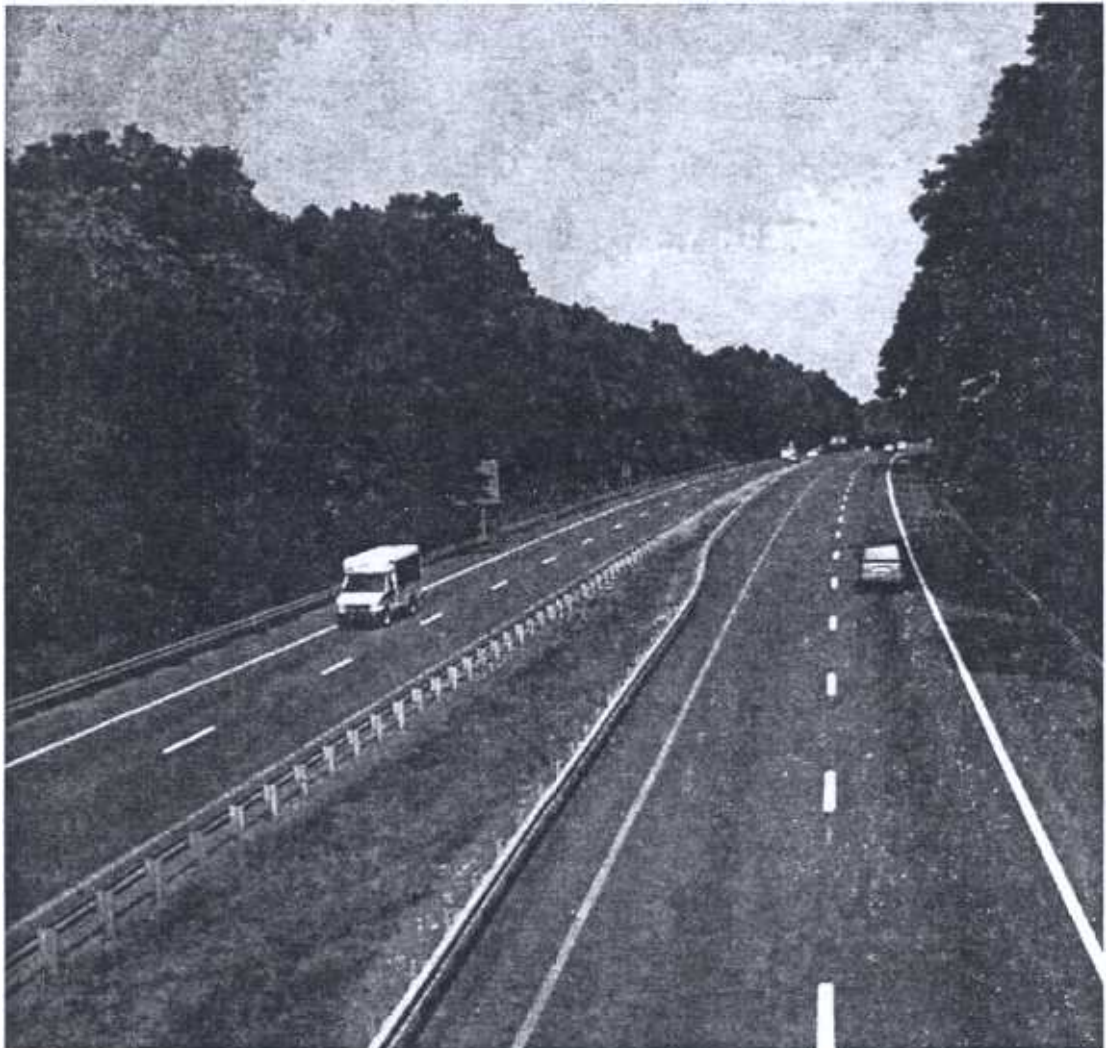


FERC/EIS 0123D

**Federal Energy Regulatory Commission
Office of Energy Projects**

MILLENNIUM PIPELINE PROJECT

Supplemental Draft Environmental Impact Statement



**Millennium Pipeline Company L.P.
Docket No. CP98-150-000 et al.
Columbia Gas Transmission Corporation
Docket No. CP98-151-000**

March 2001

In Reply Refer To:
OEP/DEER/Gas Group 2
Millennium Pipeline Company, L.P.
Docket Nos. CP98-150 et al., and
Columbia Gas Transmission Company,
Docket No. CP98-151-000

TO THE PARTY ADDRESSED:

The staff of the Federal Energy Regulatory Commission (FERC or Commission) has prepared this supplemental draft environmental impact statement (SDEIS) on natural gas pipeline facilities proposed by Millennium Pipeline Company, L.P. (Millennium) and Columbia Gas Transmission Company in the above-referenced dockets.

The SDEIS was prepared to satisfy the requirements of the National Environmental Policy Act. The staff concludes that if the Commission certifies the proposed Millennium Pipeline Project with all the recommended mitigation measures, the environmental impacts associated with constructing and operating the amended portions of the proposed project discussed in Part I of this SDEIS would have limited adverse environmental impact. Part II of this SDEIS provides analyses of a number of other aspects of the proposed project, and we note that additional mitigation measures would need to be included in the Commission certificate to address these aspects of the proposal. The SDEIS also evaluates alternatives to the proposal, including system alternatives. We note that other issues and environmental impacts were previously identified in our draft environmental impact statement (DEIS) issued on April 16, 1999. This SDEIS addresses only the issues where important information about the originally proposed Millennium Pipeline Project has been updated since we issued the DEIS.

Part I of the SDEIS addresses the potential environmental effects from construction and operation of the following proposed facilities:

22.7 miles of 24-inch-diameter pipeline in Westchester County, New York; and
five mainline valves.

Part II of the SDEIS addresses certain issues identified in comments we received on the DEIS, and includes issues associated with:

the black dirt area in Orange County, New York;
water resources (e.g., ground and surface waters, Lake Erie, the Hudson River, and Catskill Aqueduct);
coastal zone management consistency;
route alternatives at the Hudson River; and
numerous specific route variations.

The purpose of the Millennium Pipeline Project would be to transport up to 700,000 decatherms

per day and provide firm natural gas transportation service for nine shippers beginning on November 1, 2002.

The SDEIS will be used in the regulatory decision-making process at the FERC and may be presented as evidentiary material in formal hearings at the FERC. While the period for filing interventions in this case has expired, motions to intervene out-of-time can be filed with the FERC in accordance with the Commission's Rules of Practice and Procedures, 18 CFR 385.214(d). Further, anyone desiring to file a protest with the FERC should do so in accordance with 18 CFR 385.211.

Comment Procedures and Public Meeting

Any person wishing to comment on the SDEIS may do so. To ensure consideration of your comments on the proposal in the final environmental impact statement, it is important that we receive your comments before the date specified below. **Please carefully follow these instructions to ensure that your comments are received in time and properly recorded:**

Send two copies of your comments to:

Secretary
Federal Energy Regulatory Commission
888 First St., N.E., Room 1A
Washington, DC 20426;

Label one copy of the comments for the attention of the DEER Gas Group 2, PJ-11.2;

Reference Docket No. CP98-150 et al.; and

Mail your comments so that they will be received in Washington, DC on or before April 30, 2001.

In addition to written comments, we will hold a public meeting in the project area to receive comments on the SDEIS. Interested groups and individuals are encouraged to attend and present oral comments on the environmental impact described in the SDEIS. Transcripts of the meeting will be prepared.

The public meeting will begin at 7:00 pm, and is scheduled as follows

April 9, 2001	Ossining High School 29 South Highland Ave. Ossining, New York 10562 914-941-7700
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After the comments are reviewed, any significant new issues are investigated, and modifications are made to the SDEIS, a Final Environmental Impact Statement (FEIS) will be published and distributed by the staff. The FEIS will contain the staff's responses to timely comments filed on the SDEIS.

Comments will be considered by the Commission but will not serve to make the commentor a party to the proceeding. Any person seeking to become a party to the proceeding must file a motion to

intervene pursuant to Rule 214 of the Commission's Rules of Practice and Procedures (18 CFR 385.214).

Anyone may intervene in this proceeding based on this SDEIS. You must file your request to intervene as specified above. **You do not need intervenor status to have your comments considered.**

The SDEIS has been placed in the public files of the FERC and is available for inspection at:

Federal Energy Regulatory Commission
Public Reference and Files Maintenance Branch
888 First Street, N.E.
Washington, D.C. 20426
(202) 208-1371

A limited number of copies are available from the Public Reference and Files Maintenance Branch identified above. In addition, copies of the SDEIS have been mailed to Federal, state, and local agencies, public interest groups, individuals who have requested the SDEIS, newspapers, and parties to this proceeding.

In addition, **the notice of availability (NOA) issued by the FERC for the SDEIS, will also serve as a supplemental Public Notice for the U.S. Army Corps of Engineers for their Application for Permit pursuant to Section 10 of the Rivers and Harbors Act of 1899 (33 U.S.C. 403) and Section 404 of the Clean Water Act (33 U.S.C. 1344).** The original Public Notice which described the proposed pipeline from Canada to New York is available for review at both the New York (www.nan.army.mil) and Buffalo (www.lrb.army.mil) District's web sites.

If you wish to provide written comments to the Corps of Engineers on the subject activity, please provide them within 30 days of the FERC's NOA to:

U.S. Army Corps of Engineers, New York District
Regulatory Branch, Albany Field Office
1 Bond Street
Troy, New York 12180
Attn: Heidi Firstencel, Permit Application No. 1999-00640

Additional information about the proposed project is available from the Commission's Office of External Affairs, at (202) 208-1088 or on the FERC Internet website (www.ferc.fed.us) using the "RIMS" link to information in this docket number. Click on the "RIMS" link, select "Docket #" from the RIMS Menu, and follow the instructions. Or assistance with access to RIMS, the RIMS helpline can be reached at (202) 208-2222.

Similarly, the "CIPS" link on the FERC Internet website provides access to the texts of formal documents issued by the Commission, such as orders, notices, and rulemakings. From the FERC Internet website, click on the "CIPS" link, select "Docket #" from the CIPS menu, and follow the instructions. For assistance with access to CIPS, the CIPS helpline can be reached at (202) 208-2474.

David Boergers
Secretary

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Supplemental Environmental Impact Statement

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ACRONYMS AND ABBREVIATIONS

AADT	annual average daily traffic
Algonquin	Algonquin Gas Transmission Company
ACHP	Advisory Council on Historic Preservation
API	American Petroleum Institute
BA	Biological Assessment
CAS	construction alignment sheets
CEQ	Council on Environmental Quality
Certificate	Certificate of Public Convenience and Necessity
CFR	Code of Federal Regulations
CO	carbon monoxide
Coca Cola	Coca Cola Bottling Company of New York
COE	U.S. Army Corps of Engineers
Columbia	Columbia Gas Transmission Corporation
Commission	Federal Energy Regulatory Commission
ConEd	Consolidated Edison Corporation
CWA	Clean Water Act
CZM	Coastal Zone Management
dBa	decibels
dbh	diameter at breast height
DEIS	Draft Environmental Impact Statement
dth	decatherms
ECS	Millennium's Environmental Construction Standards
EFH	Essential Fish Habitat
EIS	Environmental Impact Statement
EMF	electromagnetic fields
EPA	U.S. Environmental Protection Agency
ESA	Endangered Species Act
FEIS	Final Environmental Impact Statement
FEMA	Federal Emergency Management Agency
FERC	Federal Energy Regulatory Commission
FTA	Federal Transit Administration
FWS	U.S. Fish and Wildlife Service
HC	hydrocarbons
IBM	International Business Machines
Iroquois	Iroquois Gas Transmission System
LCOR/Eastview	LCOR Asset Management L.P. and Eastview Holdings L.L.C.
LOS	level of service
LWRP	Local Waterfront Revitalization Program
MAOP	maximum allowable operating pressure
Memorandum	Memorandum of Understanding on Natural Gas Transportation Facilities
Metro North	Metro North Commuter Railroad Company
Millennium	Millennium Pipeline Company, L.P.
MLV	mainline valves
MMcf/d	million cubic feet per day
MP	milepost
MOU	Memorandum of Understanding
MSFCMA	Magnuson-Stevens Fishery Conservation and Management Act
National Fuel	National Fuel Gas Supply Corporation

ACRONYMS AND ABBREVIATIONS (cont'd)

NEB	Canadian National Energy Board
NEPA	National Environmental Policy Act
NGA	Natural Gas Act
NHPA	National Historic Preservation Act
NMFS	National Marine Fisheries Service
NO _x	nitrogen oxides
NPDES	National Pollutant Discharge Elimination System
NRHP	National Register of Historic Places
NRCS	U.S. Department of Agriculture, Natural Resource Conservation Service
NWI	National Wetlands Inventory
NYDPS	New York Department of Public Service
NYNHP	New York Natural Heritage Program
NYCDEP	New York City Department of Environmental Protection
NYS&M	State of New York Department of Agriculture and Markets
NYSDEC	New York State Department of Environmental Conservation
NYS&S	New York State Department of State
NYS&T	New York State Department of Transportation
Original	Original proposed route along the ConEd powerline right-of-way
Proposed Route	
OEP	Office of Energy Projects
PA	programmatic agreement
PEM	palustrine emergent
PFO	palustrine forested
Plan	FERC Upland Erosion Control, Revegetation, and Maintenance Plan
POW	palustrine open water
Procedures	FERC Wetland and Waterbody Construction and Mitigation Procedures
PSCNY	Public Service Commission of State of New York
psig	pounds per square inch
RSPA	Research and Special Programs Administration
Sampling Plan	Sampling Plan for Monitoring Cross-Hudson Pipelaying Operations
SCADA	Supervisory Control and Data Acquisition
SCC	stress corrosion cracking
SDEIS	Supplemental Draft Environmental Impact Statement
Secretary	Secretary of the Commission
SHPO	State Historic Preservation Officer
SNOI	Notice of Intent to Prepare a Supplement to the Draft Environmental Impact Statement for the Proposed Millennium Pipeline Project, As Amended; Request for Comments on Environmental Issues; and Notice of Public Scoping Meeting and Site Visit
SO ₂	sulfur dioxide
SPCC Plan	Spill Prevention, Containment, and Control Plan
St. Clair	St. Clair Pipelines Ltd.
T	trout
Tennessee	Tennessee Gas Pipeline Company
Texas Eastern	Texas Eastern Transmission System
TOGS	Technical and Operational Guidance Series
TransCanada	TransCanada Pipelines Ltd.
Transco	Transcontinental Gas Pipe Line Corporation
TS	trout spawning
TSS	total suspended solids

ACRONYMS AND ABBREVIATIONS (cont'd)

VOC	volatile organic compounds
U.S.	United States
USDOT	U.S. Department of Transportation
USGS	U.S. Geological Survey

EXECUTIVE SUMMARY

This supplemental draft environmental impact statement (SDEIS) for the Millennium Pipeline Project has been prepared by the staff of the Federal Energy Regulatory Commission (FERC or Commission) to fulfill the requirements of the National Environmental Policy Act.

In December 1997, Millennium filed its initial application, under section 7(c) of the Natural Gas Act and Part 157 of the Commission's regulations, to construct, acquire, own, and operate a 424-mile-long natural gas pipeline that would extend from an interconnection in Lake Erie at the Canada/U. S. border, through southern New York to Mount Vernon, Westchester County, New York. In April 1999, the draft environmental impact statement (DEIS) was issued. Among the commenters on the DEIS were the Public Service Commission of State of New York (PSCNY) and Consolidated Edison Company (ConEd) whose primary concern was the location of the pipeline within the ConEd powerline right-of-way in Westchester County. Both indicated that an accident associated with construction or operation of the pipeline within this critical right-of-way could result in a power outage in New York City. In June 2000, Millennium Pipeline Company L.P. (Millennium) filed an amendment (Docket No. CP98-150-001) to its pending certificate application that partially addressed this concern and reflected a new proposed route (designated the 9/9A Proposal) in Westchester County, New York.

This SDEIS is in two parts. Part I only addresses the environmental impact associated with construction of the 25.4 miles of pipeline associated with 9/9A Proposal between mileposts (MPS) 391.2 and 416.6, including about 2.7 miles, between MPS 404.1 and 406.8, where the route is unchanged from the originally proposed project. Part II addresses some of the issues identified in comments on the DEIS where we ^{1/} believed updated project information on the pipeline route was needed. It only includes issues associated with the black dirt area in Orange County, the Amish lands in Cattaraugus County, waterbody crossings (e.g., surface waters, Lake Erie, and the Hudson River), the Catskill Aqueduct in Westchester County, coastal zone management consistency, Hudson River Alternatives, and route variations identified during the public comment period on the DEIS.

PART I - 9/9A PROPOSAL

Project Impacts

About 8.8 miles of the 9/9A Proposal would require roadside construction along U.S. Route 9 (2.1 miles northbound), State Route 9A (4.3 miles northbound), and State Routes 9A/100 (2.4 miles southbound). Depending on the location, the pipeline would be installed between 0 and 23 feet from the painted lane line separating the travel lane from the paved shoulder, and one lane of the road would be shut down for the construction work area during the non-peak traffic hours. For an additional 9.1 miles (including 1.9 miles along State Routes 9A/100), the pipeline would be installed within existing bicycle paths along an abandoned railroad right-of-way.

Because of the extensive use of roadways or bicycle paths for installation of the 9/9A Proposal, Millennium would install the pipeline within a construction right-of-way that generally would not exceed a nominal width of 35 feet. Construction would affect a total of about 136.2 acres of land, of which 22.1 acres is forested. The 9/9A Proposal would cross 31 waterbodies, of which 4 are intermittent. The Croton River, which is about 290 feet wide at the crossing location, would be crossed using a directional drill. The 9/9A Proposal would also cross 12 wetlands, affecting about 3.3 acres during construction and 2.4 acres during operation. Millennium would implement special construction and restoration procedures to minimize

¹We, "us" and "our" refer to the environmental staff of the Office of Energy Projects, part of the Commission staff.

EXECUTIVE SUMMARY (cont'd)

impact on waterbodies and wetlands. Four Federal or state listed threatened and endangered species were identified along the pipeline route, but no impact on these species is anticipated.

A total of 4 residences and 33 businesses would be within 50 feet of the construction work areas. One of the concerns about the 9/9A Proposal would be the removal of trees along State Route 9A where the trees provide screening for residences located along the highway. Millennium has identified each area where residences could be affected by tree removal and is working with landowners to either preserve the trees or replace them. We have recommended that Millennium file a site-specific plan to restore vegetative screening or install screening fences near the residences. Millennium is working with business owners who have identified concerns about the location of the pipeline on their properties and identified two variations to resolve concerns. We have also recommended that Millennium file mitigation plans for the 12 recreation areas that would be crossed by the 9/9A Proposal.

Millennium conducted cultural resources surveys of the construction right-of-way, extra work areas, and access roads, except for approximately 1 mile where access was denied. The pipeline would cross two National Historic Landmarks (Van Cortlandt Manor and Old Croton Aqueduct Historic District) and three National Register of Historic Places (NRHP)-eligible properties. Fifteen other locations require additional cultural resource investigations. We have recommended that construction be deferred until all cultural resource surveys, testing, and any required mitigation plans have been completed and the reports filed, along with the State Historic Preservation Officer and the Advisory Council on Historic Preservation comments, as necessary.

During construction, lane closures along roads would cause traffic and noise impacts on the communities in which it occurs. Traffic delays can be expected depending on the time of day and location of construction activities, and have been estimated using currently approved traffic modeling methodologies. Based on the results of this analysis, we have recommended further restrictions on when construction can occur within the roadway, and additional traffic management plans for certain intersections and road crossings. This should help to reduce backups and travel delays. Because the southbound lane of State Route 9A/100 is a designated evacuation route for the Indian Point Power Plant, we have recommended that Millennium assist the Federal Emergency Management Agency in the development of an appropriate emergency evacuation plan during construction.

Construction noise (estimated at an L_{dn} of 86 dBA over a 24-hour period) could be annoying to nearby residents, but would be temporary since construction would be expected to move at a rate of about 400 feet per day. The operation of construction equipment along the right-of-way would temporarily increase air emissions in the immediate vicinity of the work zone, but our emissions analysis indicates that this would not be significant.

Alternatives Considered

We evaluated two principal alternatives to the 9/9A Proposal, the Original Proposed Route Alternative and the ConEd Offset/State Route 100 Alternative. The originally proposed route, as previously discussed in the DEIS, raises issues of electric reliability during the construction of the pipeline.

The ConEd Offset/State Route 100 Alternative would move the pipeline to parallel the ConEd right-of-way and State Route 100 between MPs 391.2 to 401.4. This alternative would follow the ConEd right-of-way (7 miles), the Taconic Parkway (0.5 miles), State Route 100 (1.5 miles), and the North County Trail (1.2 miles). It would replace about 10.2 miles of the 9/9A Proposal and would require the least amount of roadside construction (1.5 miles versus 6.4 miles for the corresponding segment of the 9/9A Proposal).

EXECUTIVE SUMMARY (cont'd)

although the pipeline would be installed within the bicycle path of the North County Trail along State Route 100. This alternative would also avoid traffic impacts related to roadside construction and disruption in the communities most affected by the 9/9A Proposal in Croton-on-Hudson, Ossining, and Briarcliff Manor north of MP 401.3 (where the ConEd Offset/State Route 100 Alternative ties back into the 9/9A Proposal). Traffic issues south of this point would be the same as for the proposed route, including use of one southbound lane of State Route 9A/100 for construction.

The ConEd Offset/State Route 100 Alternative has less residential and commercial development adjacent to it, but would affect more wetlands and forest than the 9/9A Proposal. Also, it would require open cut crossings of Furnace Brook and Teatown Lakes. Since we acknowledge that the ConEd powerline right-of-way is a sensitive utility resource and needs to be protected, we have evaluated placing the pipeline adjacent to the ConEd right-of-way and about 100 feet from the electric towers instead of between and within 50 feet of the towers. We believe that pipeline placement on only one side of and at a greater distance from the powerline may help alleviate many concerns about construction near electric transmission lines and towers. The PSCNY may be able to expand its Memorandum of Understanding with Millennium to incorporate the ConEd Offset/State Route 100 Alternative. If the PSCNY can do this then this route is a viable option that would help minimize impacts on the communities of Croton-on-Hudson, Ossining, and Briarcliff Manor.

Public Comments and Areas of Concern

On August 9, 2000, the FERC issued a Notice of Intent to Prepare a Supplement to the Draft Environmental Impact Statement for the Proposed Millennium Pipeline Project, As Amended; Request for Comments on Environmental Issues; and Notice of Public Scoping Meeting and Site Visit (SNOI). The SNOI was sent to about 2,014 individuals and organizations. A public scoping meeting to provide the general public with an opportunity to learn more about the 9/9A Proposal and to comment on environmental issues to be addressed in the SDEIS was held in Croton-On-Hudson, New York, on September 14, 2000.

The most frequently mentioned comments on the 9/9A Proposal were: traffic impacts, and the associated increase in air and noise pollution from pipeline construction and traffic delays on U.S. Route 9 and State Route 9A; third-party damage from digging or other utility work within U.S. Route 9 and State Route 9A that could cause a pipeline rupture, affecting the safety of nearby residents; loss of tree screening that provides a visual and noise barrier to residences that abut U.S. Route 9 and State Route 9A; loss of property values; safety concerns associated with an emergency at the Indian Point Nuclear Power Plant since U.S. Route 9 and State Routes 9A and 100 are designated emergency evacuation routes; impacts on the bicycle trails, the Van Cortlandt Manor property, and a commuter railroad; specific concerns about the pipeline placement on certain properties; concern that the pipeline would be too close to residences and people; continued concern that the pipeline would be too close to the ConEd facilities; and continued concern that construction and operation of the pipeline could cause damage to the Catskill Aqueduct. Eighty-two percent of the commenters requested that the pipeline be placed along the ConEd right-of-way, thus avoiding construction along U.S. Route 9 and State Route 9A through the communities of Croton-on-Hudson, Ossining, and Briarcliff Manor.

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PART II - UPDATED PROJECT INFORMATION

Black Dirt Area

A unique portion of the Hudson Hills physiographic region known as the "black dirt" area is comprised of peat deposits in the Pine Island area in Orange County, New York. Millennium has prepared a site-specific plan for the black dirt area to address concerns identified by landowners and the State of New York Department of Agriculture and Markets (NYSDA&M). The final Black Dirt Plan (December 2000) is the result of numerous meetings and consultations, and is acceptable to the NYSDA&M.

Amish Farms

The NYSDA&M identified an area in western Cattaraugus County where the pipeline would cross properties owned by Amish farmers, who depend on shallow springs for water supplies. The NYSDA&M, county agency representatives, and landowners identified various mitigation measures to minimize these impacts. We have recommended that Millennium continue working on the development of site-specific mitigation plans for construction through these farms.

Surface Waters

Excluding the waterbodies crossed by the 9/9A Proposal, the pipeline would cross a total of 476 waterbodies including 282 perennial (including Lake Erie) and 194 intermittent waterbodies. Millennium proposes to cross 463 waterbodies (97 percent of all waterbodies) using dry crossing techniques (e.g., directional drill, conventional bore, dry ditch or a combination of these techniques). Millennium received its section 401 Water Quality Certificate from the Pennsylvania Department of Environmental Protection (PADEP) for the Lake Erie crossing in March 2000. Millennium also received its section 401 Water Quality Certificate from the New York State Department of Environmental Conservation (NYSDEC) in December 1999. Although the U.S. Army Corps of Engineers (COE) has not yet completed its project review, we believe that the proposed crossing procedures and specified mitigation, along with our recommendations, would minimize impact on waterbodies to the greatest extent practical.

Lake Erie

The pipeline would cross a total of about 32.9 miles of Lake Erie within U.S. waters and 60.4 miles within Canadian waters. In response to comments that the pipeline could be damaged from ice scour along the bottom of Lake Erie, the U.S. Army Engineer Research and Development Center (ERDC) at the Cold Regions Research and Engineering Laboratory reviewed the analyses prepared by C-CORE and Millennium on the proposed trench depth in the lake. As a result of this review, the ERDC recommended that the trench depth be increased from 9.2 feet (Millennium's original proposal) to 11.2 feet in the areas nearest the U.S. shore. Millennium has agreed to install its pipeline at the recommended depths. The ERDC also reviewed Millennium's turbidity modeling and determined it to be conservative. No additional sampling or analyses were recommended for contaminated sediments. We recommended that the final plan for construction in Lake Erie including revised trench depths, emergency repair procedures, turbidity monitoring, and construction procedures be filed prior to construction.

Hudson River

The pipeline would cross the Hudson River in Haverstraw Bay, between Bowline Point in Haverstraw and the Franklin Delano Roosevelt Veteran's Administration Hospital in Cortlandt, about 11.3

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miles north of Nyack, New York, and the Tappan Zee Bridge. The proposed crossing would be 2. miles long, making directional drilling infeasible as a construction option.

The U.S. Fish and Wildlife Service (FWS), National Marine Fisheries Service (NMFS) and New York State Department of State (NYSDOS) had objected to Millennium's original proposal (a conventional open-cut, spoil side-casting construction method) because of potential impacts on the sensitive ecological resources at the proposed crossing. The crossing would be within habitat for the federally endangered shortnose sturgeon, designated essential fish habitat (EFH) for seven species of fish, and the New York coastal zone. Millennium currently proposes to use an open-water, lay-barge construction method. This would involve installing the pipeline in 1,300-foot-long segments, dredging with a closed bucket, storing the dredge spoil in barges, and backfilling the trench using bottom-dump barges. Based on turbidity modeling, the total area affected by operation on any given day would range between 0.06 acre and 5.23 acres depending on the operation, with periodic impacts involving about 9.18 acres during backfill in deep water using the bottom dump barges. Proposed construction would affect about 1.5 percent of the bay over the duration of the crossing.

Millennium proposes to cross the Hudson River over a 3-month period between July 1 and September 30. The NMFS, NYSDOS, and New York State Department of Conservation (NYSDEC) commented on the construction window, with varying recommendations. We have concluded that a late summer to autumn period would be the least disruptive to the federally endangered shortnose sturgeon, EFH, and state species of concern and recommended that construction across the Hudson River/Haverstraw Bay occur between August 1 and October 31 (see the Biological Assessment and EFH Assessment dated January 2001). The NYSDOS will complete its analysis of the project to determine coastal zone consistency following publication and review of the environmental impact statement (EIS). Similarly, the NMFS and FWS would use the EIS, along with our EFH Assessment and BA to complete their review.

We believe that compared to Millennium's original proposal, the currently proposed closed-bucket, lay-barge dredge method would significantly reduce environmental impacts on the Hudson River and Haverstraw Bay. With the revised proposed construction method, most impacts would be temporary and construction would be completed within a 3-month construction window. We note that the NYSDEC has approved the proposed project by issuing its section 401 Water Quality Certificate. We have recommended that Millennium file all plans it develops and additional sampling data it collects in compliance with the conditions of the NYSDEC-issued Water Quality Certificate, before construction.

Catskill Aqueduct

The pipeline would cross the Catskill Aqueduct in Yonkers, New York. The New York City Department of Environmental Protection (NYCDEP) expressed concern about this crossing because the top of the aqueduct is about 8 feet below the surface in this area. The NYCDEP believes that a failure of the pipeline could result in an interruption of water supplied to New York City via the aqueduct. Millennium has met with the NYCDEP and has prepared a site-specific plan for the aqueduct crossing. To ensure that the NYCDEP's concerns are addressed, we have recommended that Millennium file the results of an independent engineering analysis of this plan, along with NYCDEP's comments on the analysis, prior to construction.

Coastal Zone Management Consistency

No part of the project would be on land in Pennsylvania, and the only affected area within the Pennsylvania coastal zone would be in Lake Erie. No impacts are anticipated on cultural resources or

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endangered and threatened species within the designated Pennsylvania coastal zone. Millennium received a coastal zone consistency determination from the PADEP in April 2000.

Millennium initiated consultation and filed its coastal zone management (CZM) consistency application with the NYSDOS in November 1998 for the segments of pipeline within the coastal zone of New York (the Lake Erie and Hudson River areas). In June 2000, Millennium provided an updated CZM consistency application to the NYSDOS that included the 9/9A Proposal. Based on our consultations with the NYSDOS, the Lake Erie crossing appears to be consistent with New York CZM policies. The revised construction method for the Hudson River crossing (using a closed-bucket, lay-barge dredge during a construction time window that would minimize potential impacts to federal and state-sensitive fishery resources) represents a significant improvement over the original side-cast, dredge construction method. While we believe that construction of the pipeline within the state-designated coastal zone may have a significant, temporary impact, we believe that construction and operation of the pipeline would not represent a long-term impact on the coastal zone or its policies. Millennium is also coordinating with the COE, NMFS, FWS, and NYSDEC as part of other required Federal and state permit processes. The NYSDOS has not yet completed its review of the project. We have recommended that Millennium file a determination of consistency with the New York State CZM Plan.

Hudson River Alternatives

We evaluated two alternative crossings of the Hudson River, one about 3.3 miles north of the proposed crossing in Haverstraw Bay adjacent to the Algonquin Gas Transmission Company's pipeline crossing and one about 11.3 miles south of the proposed crossing adjacent to the Tappan Zee Bridge. Both the NMFS and NYSDOS indicated that, because these alternatives would be outside of Haverstraw Bay, they would reduce impacts on the bay.

We examined two potential routes between Ramapo in Rockland County and Cortlandt in Westchester County for the north alternate Hudson River crossing. Alternative 1 would be about 4.9 miles longer than the proposed route and would require that significant segments of the pipeline be placed within Harriman State Park to avoid residential properties. Alternative 2 would be about 4.7 miles longer than the proposed route and would require significant amounts of in-street construction through existing and developing residential subdivisions. Both alternatives would require an open cut crossing of the Hudson River at a location that we do not believe is feasible from a construction standpoint because of existing utility (pipeline and powerline) and industrial development on both banks of the river. Since these alternatives would result in at least an equal environmental impact compared to the proposed route and would be longer, we do not recommend these routes.

We examined one alternative route to the south of the proposed Hudson River crossing between Ramapo in Rockland County and Greenburgh in Westchester County. Although the Tappan Zee Bridge Alternative would be about 9.4 miles shorter than the corresponding segment of the proposed route, additional construction would be required for two customers in Rockland and Westchester Counties. If the alternative were used and laterals to these two delivery points were required, the Tappan Zee Bridge Alternative would be about 1.4 miles longer than the proposed route. In addition, this alternative would require construction within the Palisades Interstate Parkway (a NRHP-listed property) for about 5.7 miles as well as construction adjacent to Interstate 287 (3.7 miles), within DePew Street in Nyack (0.8 mile) and State Route 119/White Plains Road (2.5 miles). The staging areas for the Hudson River crossing would need to be located in Memorial Park in Nyack and Lucee Park in Tarrytown (west and east banks of the Hudson River, respectively). We believe that construction of the Tappan Zee Alternative would be extremely difficult and would result in significant impact on the Palisades Parkway, Interstate 287, State Route 119,

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the parks in Nyack and Tarrytown, and residential and commercial development in both Rockland and Westchester Counties. Since it would also require a significantly longer crossing of the Hudson River (about 0.6 mile longer than the proposed crossing), we do not recommend its use.

Route Variations

We reviewed 21 route variations suggested by landowners, area residents, and others. Most of the variations were identified for specific reasons to address landowner concerns about the placement of the pipeline on their property. Others were suggested as a means to reduce environmental impact. Some were not practicable or offered no significant environmental advantage. Millennium proposes to incorporate 12 route variations into its proposed route.

Public Comments and Areas of Concern

In February 1998, the FERC issued a Notice of Intent to Prepare an Environmental Impact Statement for the Proposed Millennium Pipeline Project and Request for Comments on Environmental Issues (NOI). The NOI was sent to about 2,237 individuals and organizations. Public scoping meetings were held in North East, Pennsylvania (March 16, 1998); and in Wellsville (March 17, 1998), Binghamton (March 18, 1998), Yonkers (March 24, 1998), and Port Jervis, New York (March 25, 1998). We received comments from a total of 85 individuals at the scoping meetings and additional written comments (including 330 form letters and 95 requests to intervene) from a total of 752 individuals representing Federal and state agencies, counties, municipalities, organizations, and concerned citizens.

In December 1998, we sent copies of the Preliminary DEIS to the cooperating agencies (the NYSDA&M and the COE, Buffalo District) to solicit specific comments on issues and to allow them to take part in the actual drafting of the document. We received comments from both agencies and incorporated them into the DEIS, as appropriate. We issued the DEIS in April 1999, and mailed it to 1,680 agencies, groups, and individuals. In response to requests to extend the comment period, the Commission granted an extension from June 7 to June 22, 1999. Within the comment period, we received a total of 182 comment letters, representing 13 Federal agencies, 19 state agencies and state representatives, the Seneca Indian Nation, 27 county and municipal agencies, and 122 individuals and groups. In addition, public meetings to receive comments on the DEIS were held along the pipeline route in New York in: Goshen (May 17, 1999), Yonkers and Mayville (May 18, 1999), Horseheads (May 19, 1999), and Binghamton and Wellsville (May 20, 1999).

The most frequently mentioned comments on the DEIS included concerns that the: need for the project was not adequately addressed; issues and concerns were not adequately assessed and should be addressed in a supplemental DEIS; the system and major route alternatives were not fully developed or analyzed; the proposed route in the Union Center area would adversely affect landowners; waterbody crossing methods had been modified by Millennium, but were not included in the DEIS; the design for the Lake Erie crossing did not adequately address the potential for damage to the pipeline from ice scour; the Hudson River crossing would not be consistent with New York CZM policies; the construction procedures for the Hudson River crossing did not fully address issues associated with resuspension of contaminated sediments or with the turbidity plume; recreational fisheries in the Delaware River system would be negatively affected; no site-specific plan had been developed for the black dirt area; construction would have significant adverse impact in Westchester County, and particularly in the City of Yonkers; an accident associated with construction or operation of the pipeline along the ConEd right-of-way would result in power outages to New York City; construction and operation of the pipeline could rupture the Catskill Aqueduct

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which supplies water to New York City; and other concerns related to site-specific crossings of public and private property.

MAJOR CONCLUSIONS

We conclude that, even though the 9/9A Proposal would result in short-term, locally significant unavoidable adverse environmental impact, it is an appropriate route for the proposed deliveries to Mount Vernon, New York. We reviewed a wide range of alternatives in reaching this conclusion. As part of our analysis, we have developed specific mitigation measures that we believe to be appropriate and reasonable for construction and operation of these parts of the project and that these measures would reduce the environmental impact. The primary reasons for our decision are:

Millennium would implement the construction and restoration procedures identified in its Environmental Construction Standards, which incorporate our Upland Erosion Control, Revegetation and Maintenance Plan and Wetland and Waterbody Construction and Mitigation Procedures; and

compliance with the Endangered Species Act, Clean Water Act, Coastal Zone Management Act, and the National Historic Preservation Act would be completed before Millennium would be allowed to begin construction.